UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7
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DEC 15 2014

OFFICE OF THE
REGIONAL ADMINISTRATOR

Mr. Brian D. Wittick, Chief
U.S. Nuclear Regulatory Commission
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation
Washington, D.C. 20555-0001

Dear Mr. Wittick:

The U.S. Environmental Protection Agency has reviewed the Nuclear Regulatory Commission's Generic Environmental Impact Statement, Supplement 51, for the Callaway Plant, Unit 1, Final Report, dated October 2014. Our review is provided pursuant to the National Environmental Policy Act 42 U.S.C. 4231, Council on Environmental Quality regulations 40 C.F.R. Parts 1500-1508, and Section 309 of the Clean Air Act. The GEIS, Supplement 51, was assigned the CEQ number 20140321.

The NRC is proposing to renew the license of the Callaway Plant for an additional 20 years beyond the expiration date of the facility's current 40-year license which is October 18, 2024. The facility is located in Callaway County, Missouri, approximately 25 miles northeast of Jefferson City, Missouri.

EPA issued a rating of the draft Supplemental Environmental Impact Statement for this project EC-2 (Environmental Concerns-Insufficient Information). Of the issues and concerns identified in our April 7, 2014, comment letter on the draft SEIS, we continue to believe that additional information regarding the on-site storage of spent fuel during facility operations and the potential impacts to the plant's intake structure from changes in hydrologic conditions within the Missouri River system could be more thoroughly characterized. The insufficient treatment of these two issues contributed to our initial rating of EC-2 for the Draft SEIS. After reviewing NRC's response to EPA comments and discussions with NRC, our concerns with the level of detail regarding these issues in the SEIS remain and we believe that further discussion of these issues should be provided in the Record of Decision.

With regard to on-site storage of spent fuel, we note the Draft and Final EIS indicate that the spent fuel pool for the Calloway Plant will reach its maximum capacity prior to the start of the proposed license renewal. However, little information is provided on how the plant will manage these storage issues, other than noting that an Independent Spent Fuel Storage Installation for the plant will be constructed in the future. We have since learned that Ameren Missouri has been issued a general license authorizing operation of an ISFSI (Federal Register, January 8, 2014). From a review of publically available documents, it appears that the licensee is currently constructing the ISFSI with plans to begin transferring spent fuel from the spent fuel pool to the ISFSI in 2015. Both NUREG-1437 and NUREG-2157 could contribute to the characterization of particular aspects of existing spent fuel storage at the Callaway Plant. However, as the ISFSI for the Callaway Plant has not yet been constructed, we recommend further discussion in the ROD to address how NUREG-1437 and NUREG-2157, as well as

the SEIS, relate to ongoing operations during the license renewal period. We also recommend providing information in the ROD regarding the completion date for the ISFSI, a projected loading date for the ISFSI and the design capacity.

With regard to the intake structure for the Callaway Plant, we note that while the facility itself is sited at a farther distance from and at a higher elevation above the Missouri River, the cooling water intake structure is located within the river floodplain and thus has a higher potential to be damaged by high water events than would the reactor itself. High water events possibly associated with regional climate change (e.g., changing precipitation patterns, changing hydrology) could threaten facility performance and control by interfering with or eliminating access to the water intake structure, which is the facility's primary cooling water source. In addition, low flows or drought conditions could affect access to Missouri River water. While we understand that plant operations are governed by NRC-issued operating license technical specifications and operating procedures which exist to ensure safe operation of the facility, EPA notes that under projections of regional climate change, flooding events, beyond those originally considered by NRC to be natural phenomena, could be anticipated to occur at a higher frequency. We believe it would have been appropriate to explain in the EIS how regional climate change may affect the plant's operations.

We also appreciate that in 2012, NRC requested that all licensees reevaluate, using present-day information, flooding hazards beyond Design Basis Accidents that could affect their sites ("Insights from the Fukushima Dai-Ichi Accident"). In addition, we understand that the facility's final safety analysis reports include consideration of natural phenomena and technical specification for limited operations, within which loss of cooling water incidents are to be addressed.

As conditions have changed within the Missouri River Basin since initial licensing for the Callaway Plant in 1984, a basin-specific analysis may be appropriate. We recommend that the ROD discuss the potential impacts of changing climate and hydrologic conditions of the Missouri River Basin on facility operations, and also provide a discussion of how the results of the 2012 information request have been incorporated into Callaway's preparedness and response plans.

We appreciate the opportunity to provide comments regarding this project and the NRC's process of license renewal. We also request that the NRC provide a signed copy of the ROD to EPA Region 7. If you have any questions regarding these comments, please contact Amber Tucker at 913-551-7565, tucker.amber@epa.gov.

Sincerely,

for Karl Brooks

cc: Tam Tran, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission
Marthea Rountree, OECA/OFA/NCD